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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/717,995

11/20/2003

James A. Proctor JR.

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EXAMINER

CHO, UN C

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

04/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/717,995	Applicant(s) PROCTOR ET AL.	
	Examiner UN CHO	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22,23,25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22,23,25,26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>January 9th 2008</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In response to the amendment filed on 2/26/2008, the status of the claims is as follows:

Claims 1 – 21, 24 and 27 – 29 have been cancelled, Claims 22 and 23 are withdrawn, and 25 and 26 are pending.

Election/Restrictions

2. Applicant's election with traverse of Group I (claims 22 and 23) and Group II (claims 25 and 26) in the reply filed on 2/26/2008 is acknowledged. The traversal is on the ground(s) that the inventions are not distinct. This is found persuasive, thus the restriction for Group I (claims 22 and 23) and Group II (claims 25 and 26) are withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 22, 23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 4,470,001 B1) in view of Katsura et al. (US 6,665,287 B1).

Regarding claim 22, Kim discloses a base station (Fig. 3, Base Station) for aligning CDMA reverse link channels, the base station comprising: an orthogonal channel receiver to receive an orthogonally coded signal from a subscriber unit over a reverse link (Kim: Col. 3, lines 10 – 15 wherein orthogonal codes are used between the terminal and the base station); and a timing controller to cause coarse timing adjustments to the timing of the coded signal (Kim: Col. 6, lines 33 – 67 wherein a delay estimator and a phase estimator estimates the delay and the controller of the base station makes adjustments accordingly).

However, Kim as applied above does not specifically disclose reassigning timing control of the subscriber unit previously under timing control by another base station in response to a command or message. In an analogous art, Katsura remedies the deficiencies of Kim by disclosing such limitation in Col. 5, lines 21 – 37 wherein the mobile station is handed off from one base station to another, thus reassigning timing control of the terminal. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Katsura to the system of Kim in order to provide a mobile station apparatus that can efficiently handoff to a base station in a short time while it moves from a cell of a base station in current communication to another cell of another base station for next communication and preventing transmission property from being deteriorated even in the case where the mobile station is present around a boundary between the cells of two base stations.

Regarding claim 23, Kim in view of Katsura as applied above discloses every limitation of claim 23 including determining a gross timing offset of the coded signal and causing a coarse timing adjustment to the timing of the reverse link coded signal (Kim: Col. 4, line 38 through Col. 5, line 12).

Regarding claim 25, Kim discloses an orthogonal channel transmitter to transmit a unique, orthogonally coded signal over a reverse link to a base station (Kim: Col. 3, lines 10 – 15 wherein orthogonal codes are used between the terminal and the base station) and based on time alignment the coded signal is mutually orthogonal with coded signals from at least one other subscriber unit on the reverse link with the base station (Kim: Col. 1, lines 32 – 40).

However, Kim as applied above does not specifically disclose a timing adjustment unit to cause a coarse timing adjustment of the coded signal in response to receiving a gross timing offset from the base station. In an analogous art, Katsura remedies the deficiencies of Kim by disclosing such limitation in Col. 3, lines 12 – 41 and Col. 3, line 61 through Col. 4, line 16 wherein the mobile station comprises a synchronization circuit and timing generation circuit to adjust the transmission timing. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Katsura to the system of Kim in order to provide a time alignment method to be used by the mobile station apparatus so that it can efficiently handoff to a base station in a short time while it moves from a cell of a base station in current communication to another cell of another base station for

next communication and preventing transmission property from being deteriorated even in the case where the mobile station is present around a boundary between the cells of two base stations.

Regarding claim 26, the claim is interpreted and rejected for the same reason as set forth in claim 25.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to UN CHO whose telephone number is (571)272-7919. The examiner can normally be reached on M ~ F 9:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit: 2617

/George Eng/

Supervisory Patent Examiner, Art Unit 2617

/U. C./

Examiner, Art Unit 2617